1042,703

FILE 'HOME' ENTERED AT 13:04:15 ON 02 DEC 2003

=> file biosis medline caplus wpids uspatfull COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST

1.47 1.47

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FILE 'MEDLINE' ENTERED AT 13:08:13 ON 02 DEC 2003

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FILE 'USPATFULL' ENTERED AT 13:08:13 ON 02 DEC 2003 CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

*** YOU HAVE NEW MAIL ***

=> s solid (2a) (carrier? or surface? or phase) 4 FILES SEARCHED...

L1 328237 SOLID (2A) (CARRIER? OR SURFACE? OR PHASE)

=> s l1 and oligonucleotide? 27660 L1 AND OLIGONUCLEOTIDE?

=> s 12 and (silver or copper) metal film MISSING OPERATOR COPPER) METAL The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s 12 and (silver or copper) (2a) metal film L34 L2 AND (SILVER OR COPPER) (2A) METAL FILM

=> dup rem 13 PROCESSING COMPLETED FOR L3 4 DUP REM L3 (0 DUPLICATES REMOVED)

=> d 14 bib abs 1-4

ANSWER 1 OF 4 USPATFULL on STN L4

2003:306463 USPATFULL AN

TI Protein purification and detection methods

Kimple, Michelle E., Chapel Hill, NC, UNITED STATES Sondek, John, Chapel Hill, NC, UNITED STATES IN

PA The University of North Carolina at Chapel Hill (U.S. corporation)

PΙ US 2003215897 Α1 20031120

US 2003-345574 ΑI A1 20030116 (10)

20020116 (60) US 2002-349818P PRAI 20020201 (60) US 2002-353225P

DT Utility

FS APPLICATION

JENKINS & WILSON, PA, 3100 TOWER BLVD, SUITE 1400, DURHAM, NC, 27707 LREP

Number of Claims: 78 CLMN

ECLExemplary Claim: 1 DRWN

```
10 Drawing Page(s)
 LN.CNT 6324
        The present invention relates to methods for purifying and for detecting
 AΒ
        the presence of a protein. The invention employs a NorpA sequence and a
        PDZ1 domain. A protein tagged with a NorpA sequence can associate with
        PDZ1 domain. Similarly, a protein tagged with a PDZ1 domain can
        associate with a NorpA sequence. This interaction forms an aspect of the
       protein purification methods and protein detection methods of the
       present invention. Recombinant expression vectors and a protein
       purification solid phase are also disclosed, as well
        as protein detection and purification kits.
     ANSWER 2 OF 4 USPATFULL on STN
 L4
ΑN
       2003:159265 USPATFULL
       DNA chip and its preparation
TI
       Sato, Tadahisa, Kanagawa, JAPAN
 IN
       Nakamura, Koki, Kanagawa, JAPAN
       Shinoki, Hiroshi, Saitama, JAPAN
ΡI
       US 2003108878
                           A1
                                20030612
       US 2002-42703
ΑI
                          A1
                                20020321 (10)
       Continuation of Ser. No. US 2000-749703, filed on 27 Dec 2000, ABANDONED
RLI
PRAI
       JP 1999-371333
                           19991227
DТ
       Utility
FS
       APPLICATION
LREP
       Jules E. Goldberg, Reed Smith, LLP, 17th Floor, 375 Park Avenue, New
       York, NY, 10152
CLMN
       Number of Claims: 7
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 472
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       An analytical element (typically DNA chip) composed of a solid
       carrier and a group of nucleotide derivatives or their analogues
       fixed to the solid carrier can be produced by
       bringing nucleotide derivatives or the analogues having an alkyne group
       at one terminal into contact with a zero-valent metal
       film (e.g., silver metal film or
       copper metal film) placed on the
       solid carrier.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 3 OF 4 USPATFULL on STN
L4
       2001:105167 USPATFULL
AN
TI
        DNA chip and its preparation
       Sato, Tadahisa, Kanagawa, Japan
TN
       Nakamura, Koki, Kanagawa, Japan
       Shinoki, Hiroshi, Saitama, Japan
       Fuji Photo Film Co., Ltd. (non-U.S. corporation)
PA
       US 2001006786
_{
m PI}
                        A1
                               20010705
       US 2000-749703
AΙ
                          A1
                               20001227 (9)
       JP 1999-371333
PRAI
                          19991227
DT
       Utility
       APPLICATION
FS
       REED SMITH LLP, 375 PARK AVENUE, NEW YORK, NY, 10152
LREP
       Number of Claims: 7
CLMN
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 468
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       An analytical element (typically DNA chip) composed of a solid
```

carrier and a group of nucleotide derivatives or their analogues fixed to the solid carrier can be produced by bringing nucleotide derivatives or the analogues having an alkyne group at one terminal into contact with a zero-valent metal film (e.g., silver metal film or copper metal film) placed on the solid carrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
L4
     ANSWER 4 OF 4 USPATFULL on STN
ΑN
       1999:132502 USPATFULL
       Surface-sensitive detection of hybridization at equilibrium
TI
IN
      Malmqvist, Magnus, Uppsala, Sweden
       Persson, Bjorn, Uppsala, Sweden
      Biacore AB, Uppsala, Sweden (non-U.S. corporation)
PA
ΡI
      US 5972612
                               19991026
      WO 9704129 19970206
ΑI
      US 1998-983108
                               19980515 (8)
      WO 1996-SE949
                               19960712
                               19980515 PCT 371 date
                               19980515 PCT 102(e) date
PRAI
      SE 1995-2608
                           19950714
DT
      Utility
FS
      Granted
      Primary Examiner: Horlick, Kenneth R.
EXNAM
      Seed and Berry LLP
LREP
CLMN
      Number of Claims: 14
      Exemplary Claim: 1
ECL
      12 Drawing Figure(s); 8 Drawing Page(s)
DRWN
LN.CNT 860
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
```

Amethod of analysing nucleic acid sequences comprises measuring by surface sensitive detection technique the binding interaction between a first nucleic acid sequence and a second nucleic acid sequence, one of the first and second nucleic acid sequences being immobilized to a solid phase surface, to determine the affinity or an affinity related parameter for the binding reaction as indicative of the extent of complementary between the first and second nucleic acid sequences. The method is characterized in that the measurement of the binding interaction is performed at annealing conditions adjusted such that the dissociation rate constant for the binding interaction corresponding to full complementarity between the first and second nucleic acid sequences is greater than about 10.sup.per second, thereby permitting equilibrium for the interaction to be rapidly attained.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
=> s 14 and alkyne
L5
             2 L4 AND ALKYNE
=> d 15 bib abs 1-2
L5
     ANSWER 1 OF 2 USPATFULL on STN
AN
       2003:159265 USPATFULL
TI
       DNA chip and its preparation
IN
       Sato, Tadahisa, Kanagawa, JAPAN
       Nakamura, Koki, Kanagawa, JAPAN
       Shinoki, Hiroshi, Saitama, JAPAN
PΙ
       US 2003108878
                          A1
                                20030612
ΑI
       US 2002-42703
                          Α1
                                20020321 (10)
       Continuation of Ser. No. US 2000-749703, filed on 27 Dec 2000, ABANDONED
RLI
PRAI
       JP 1999-371333
                           19991227
DT
       Utility
FS
       APPLICATION
       Jules E. Goldberg, Reed Smith, LLP, 17th Floor, 375 Park Avenue, New
LREP
       York, NY, 10152
CLMN
       Number of Claims: 7
       Exemplary Claim: 1
ECL
DRWN
       No Drawings
LN.CNT 472
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       An analytical element (typically DNA chip) composed of a solid
       carrier and a group of nucleotide derivatives or their analogues
       fixed to the solid carrier can be produced by
       bringing nucleotide derivatives or the analogues having an
       alkyne group at one terminal into contact with a zero-valent
       metal film (e.g., silver metal
       film or copper metal film) placed
       on the solid carrier.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 2 OF 2 USPATFULL on STN
       2001:105167 USPATFULL
AN
TI
        DNA chip and its preparation
       Sato, Tadahisa, Kanagawa, Japan
Nakamura, Koki, Kanagawa, Japan
IN
       Shinoki, Hiroshi, Saitama, Japan
       Fuji Photo Film Co., Ltd. (non-U.S. corporation)
PA
ΡI
       US 2001006786
                        A1
                                20010705
       US 2000-749703
AΙ
                          A1
                                20001227 (9)
       JP 1999-371333
PRAI
                          19991227
DT
       Utility
FS
       APPLICATION
LREP
       REED SMITH LLP, 375 PARK AVENUE, NEW YORK, NY, 10152
       Number of Claims: 7
CLMN
       Exemplary Claim: 1
ECL
DRWN
       No Drawings
LN.CNT 468
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       An analytical element (typically DNA chip) composed of a solid
AR
       carrier and a group of nucleotide derivatives or their analogues
       fixed to the solid carrier can be produced by
       bringing nucleotide derivatives or the analogues having an
       alkyne group at one terminal into contact with a zero-valent
       metal film (e.g., silver metal
       film or copper metal film) placed
```

09567863

on the solid carrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

```
=> S L2 AND (SILVER OR COPPER) (5A) FILM
            93 L2 AND (SILVER OR COPPER) (5A) FILM
=> s 16 and alkyne
             3 L6 AND ALKYNE
=> s 17 not 15
L8
             1 L7 NOT L5
=> d 18 bib abs
\Gamma8
     ANSWER 1 OF 1 USPATFULL on STN
ΑN
       2003:258659 USPATFULL
TI
       REAGENTS FOR OLIGONUCLEOTIDE CLEAVAGE AND DEPROTECTION
       Nelson, Jeffrey S., Woodinville, WA, UNITED STATES
TN
       PE Corporation (NY), Foster City, CA, UNITED STATES, 94404 (U.S.
PA
       corporation)
PΙ
       US 2003181712
                          A1
                               20030925
AΙ
       US 2002-91231
                          A1
                               20020304 (10)
PRAI
       US 2001-274309P
                          20010308 (60)
DT
       Utility
FS
       APPLICATION
       MILA KASAN, PATENT DEPT., APPLIED BIOSYSTEMS, 850 LINCOLN CENTRE DRIVE,
       FOSTER CITY, CA, 94404
CLMN
       Number of Claims: 83
       Exemplary Claim: 1
       7 Drawing Page(s)
LN.CNT 1432
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention provides a process for the removal of protecting
AΒ
       groups, i.e. deprotection, from chemically synthesized
       oligonucleotides. In one embodiment, the invention provides
       reagents suitable for use in such a process, and kits incorporating such
       reagents in a convenient, ready-to-use format. By use of the process and
       reagents of the invention, side-reactions leading to certain impurities
       that contaminate the synthesized oligonucleotides can be
       minimized.
```

Methods and reagents are provided for deprotection of an **oligonucleotide** by reacting a protected **oligonucleotide** with a deprotection reagent wherein the deprotection reagent comprises an active methylene compound and an amine reagent. The active methylene compound has the structure: ##STR1##

where substituent EWG is an electron-withdrawing group and R is hydrogen, C.sub.1-C.sub.12 alkyl, C.sub.6-C.sub.20 aryl, heterocycle or an electron-withdrawing group.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4

L5

=>

=> d his

(FILE 'HOME' ENTERED AT 13:04:15 ON 02 DEC 2003)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 13:08:13 ON 02 DEC 2003

L1 328237 S SOLID (2A) (CARRIER? OR SURFACE? OR PHASE)

L2 27660 S L1 AND OLIGONUCLEOTIDE?

L3 4 S L2 AND (SILVER OR COPPER) (2A) METAL FILM

4 DUP REM L3 (0 DUPLICATES REMOVED)

L6 93 S L2 AND (SILVER OR COPPER) (5A) FILM L7 3 S L6 AND ALKYNE

2 S L4 AND ALKYNE

L8 1 S L7 NOT L5